REMARKS

The courtesy of the Examiner in conducting a telephone interview on April 24, 2003 with associate attorney Renée C. Barthel of the undersigned's firm. During the interview the proposed claim amendments herein were discussed, as was Sowinski 6,135,805, the reference cited in the March 31, 2003 Office action.

In particular, it was discussed that applicant's claims should be distinguishable over the Sowinski reference because the claimed conductive clip is disposed in a cavity defined by a housing and is held fixed in the housing by the housing walls. The Examiner countered that the claims do not require that the conductive clip is disposed entirely in the cavity. The Examiner further interpreted that Sowinski's conductive clip, which is movable inside a housing, is fixed at the fulcrum point 100. Accordingly, applicant has amended claims, presented new claims and presented arguments which clarify and distinguish the claimed invention.

Claims 1-8 are remaining in the application. New claims 9-16 have been added. Each of claims 1, 7 and 8 has been amended to include that an electrically conductive clip is held fixed and non-movable in a housing by the walls of the housing. New claims 9, 15 and 16 are similar to previous independent claims 1, 7 and 8 except that they include that the electrical conductive clip is disposed entirely within a cavity defined by the interior of the housing. New claims 10-14 are similar to claims 2-6 except they depend directly or indirectly from new claim 9.

It is respectfully submitted that Sowinski 6,135,805 neither anticipates nor renders claims 1, 7 and 8 obvious. Sowinski '805 discloses an insulation displacement device for wire termination having a body portion 12 and legs 14 extending from the body portion for piercing the insulating jacket of a wire. Each leg 14 has a fork 44 and also has a lower compression side 28 and an upper force application side 30. The legs 14 are not held fixed in the housing by the

side walls 88. Rather the legs are torqued within their respective chambers 70 relative to a fulcrum 100. Each leg 14 moves relative to the side walls 88. A notch 62 in the compression side 28 of each leg 14 aids in bending of the legs 14 about the fulcrum 100. Movement of each leg 14 is achieved by pressing a tool 84 through a passage 82 in the top of the housing 15. The legs 14 are only fixed to the housing 15 indirectly by attachment to the body portion 12 outside of the defined chambers 70. Sowinski's legs therefore do not teach or suggest the electrically conductive clip, as defined in claims 1, 7 and 8, which is held fixed and non-movable in the housing.

Relative to new claims 9, 15 and 16, it is presumed in the Office action that Sowinski's body portion 12 discloses an electrically conductive clip which is disposed in a cavity defined by a housing. This is simply not satisfied by Sowinski. First, neither Sowinski's body portion 12 nor the legs 14 disclose or suggest a conductive clip which is disposed entirely within a cavity defined by the housing for electrically joining two or more incoming wires. Only Sowinski's legs 14 are disposed in the chambers 70 defined by the housing 15. The legs do not electrically connect the incoming wires. The base of each leg 14 joins to a plate 20 of the body portion 12 at a location laterally aligned with the furthest or leftmost edge of the apertures 38, as seen in Figs. 1, 2 and 6, and this location is clearly outside of the housing 15. In fact, Sowinski's electrical connection is clearly taught as occurring outside the housing on the opposite side of a bend 36, a notch 62, and apertures 38 in order to facilitate pivoting of the individual legs 14 within the housing. So the legs certainly do not electrically join each conductor of the two or more incoming wires inside the housing 15.

Any electrical connection provided by Sowinski's body portion 12 also does not comply with the claimed limitations either. The body portion 12 is disposed outside of the chambers 70

and thus is located outside of the housing 15. In Figs. 2 and 4-6, the body portion 12 is clearly positioned outside the housing 15 and outside the chambers 70. The body portion merely rests on a planar attachment surface 98 to the left of a fulcrum 100 (col. 3, lines 54-60). So any electrical joining of the two or more incoming wires occurs outside the housing, which is entirely different from the electrical connection provided by the claimed invention.

Moreover, the electrical connection between Sowinski's body portion 12 and legs 14 has several drawbacks not present in the claimed invention. Sowinski's connection is susceptible to shorting and/or failure by its exposed location outside of the housing. Sowinski's legs are clearly susceptible to breakage at the fulcrum point 100, thus causing any electrical connection between the leads 80 to be lost. Further, an electrical connection outside of the housing exposes the electrician to the risk of electrical shock and injury at the electrical connection. Any one of these situations render Sowinski's connector inoperable and ineffective. For these reasons, it is believed that claims 9, 15 and 16 are distinguishable over Sowinski '805 and should be allowed.

In response to the Examiner's comments made during the April 24, 2003, interview that Sowinski's connector could be modified to receive more than one insulated wire lead within the same lead opening, applicant's respectfully disagree for the reasons stated below. One reason is that Sowinski provides no express teaching that two insulated wire leads can be inserted into the same opening, and thus be connected by the same leg 14. Figures 2-6 show and Sowinski discloses one and only one lead 80 inserted into each passage 78 of the connector. Each leg 14 is shown piercing an insulation jacket 104 for engaging a single conductor 102.

Another reason is that Sowinski's connector simply cannot be modified for insertion of two or more connectors into a single passage 78 and effectively achieve an electrical connection. In Figures 4-5, the conductor insertion passage 78 is defined by a chamber floor 72, an end wall

74 perpendicular to the floor 72 and a lead entrance wall 76. The passage 78 is further reduced in size by the leg 14 itself which defines a V-shaped slot opening 58 at the distal ends 24 of the fork 44. Prior to insertion of the lead, the fork 44 of each leg 14 must be elevated above the chamber floor 72 to provide adequate clearance space for the insertion of the lead 80. (Col. 4, lines 5-8). The lead 80 must pass unobstructed between the floor 72 and the fork 44. This is complicated by the fact that the leg 14 is limited in the amount it may be elevated above the chamber floor 72. Each leg 14 is capable of an angular elevation of about 30 degrees relative to the planar plate 20. (Col. 2, lines 56-57). In Figure 4, this elevated position allows adequate insertion of one lead 80. If additional leads 80 were inserted, they would be obstructed either by the fork 44 or by the chamber floor 72. Thus, the angular movement of the leg is only adequate to allow one lead 80 to pass unobstructed into each passage 78.

Even if more than one lead 80 were somehow squeezed into the same passage 78, Sowinski's legs 14 fail to suggest an effective electrical connection between the conductors of such leads. Sowinski's legs 14 have prongs 46, 48 which form an electrical connection with the lead 80 by piercing through the insulation jacket 104 and embedding in opposing sides of the conductor 102. The leg 14 travels until the lead 80 is sandwiched between the leg 14 and the chamber floor 72, as shown in Figure 6. The conductor 102 is not completely cut during the travel of the leg and is disposed partially within the slot 52 between the prongs 46, 48. Nothing in Sowinski's suggests that two or more leads 80 would be effectively pierced but not cut during travel of the leg 14.

In particular, nothing prevents Sowinski's legs from completely cutting at least one of the conductors as the legs are pushed downward by the tool. After all, the fork 44 cannot pierce the second lead until it has passed the first lead. The force applied by the second lead against the

first lead further tends to force the first lead against the leg 14 for further penetration into the first lead, thus increasing the likelihood that the leg 14 will cut complete through the first lead. Another likely result is that the legs would fail to fully penetrate the insulation jacket 104 of the second lead because of the tendency of the prongs 46, 48 to separate from each other after piercing of the first lead. In either event, there is no electrical connection between the conductors of the two wire leads.

A further reason which discourages the insertion of more than one wire lead is that Sowinski's legs 14 are subject to breakage above the fulcrum point 100. Each leg 14 would require greater force to pierce more than one lead. Nothing in Sowinski suggests that the bends 34, 36 and notch 62 would be sufficient to withstand this larger force without breakage. Therefore, Sowinski never suggests more than one conductor for a single passage.

Relative to each of claims 1, 7, 8, 9, 15 and 16, it is further presumed in the Office action that Sowinski's general instruction of a conventional wire attachment 18 discloses a conductive extension which is in shorting engagement with the clip (located inside the housing) and which extends through a housing wall to an exterior of the housing. Applicant respectfully believes this interpretation of Sowinski' 805 is overreaching. Sowinski's wire attachment 18 does <u>not</u> extend through <u>any</u> housing wall. No part of the wire attachment 18 is <u>ever</u> shown as extending through the housing walls. The wire attachment 18 connects to the body portion 12 entirely <u>outside</u> the housing 15. Thus, the exposed electrical connection between the wire attachment 18 and the body portion 12 is susceptible to similar drawbacks as discussed above relative to the connection between the body portion 12 and legs 14. This is another reason which supports allowance of the independent claims.

In addition, each of the methods recited in claims 7, 8, 15 and 16 allow electrical connection between two or more wires having conductors to a common terminus. Sowinski '805 lacks this suggestion. The wire attachment 18 is attached to an electrical lead in an undisclosed manner. How can Sowinski suggest that the terminal 10 is effective in electrically connecting two or more wires to a common terminus? It is not clear what kind of connection the wire attachment 18 is actually achieved with the electrical lead. Absent applicant's disclosure, any suggestion resulting from Sowinski '805 can not anticipate the claimed invention and would not render it obvious because to do so would be an improper exercise in hindsight-based obviousness. Reconsideration is respectfully requested in light of these reasons.

Dependent claims 2-6 and 10-14 depend either directly or indirectly from claims 1 and 9 are believed to contain allowable subject matter for the same reasons. In addition, it is believed that certain dependent claims should be allowed on independent bases.

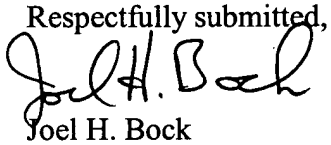
Relative to the subject matter of claims 3 and 11, applicant correctly understands Sowinski '805 to lack a two-part housing which includes a base and a cap. It is presumed that the top surface of the housing 15 serves as a cap. This reliance is misplaced. Any top surface that Sowinski's device hardly can be described as a cap. A "cap" is generally defined as a covering structure. Sowinski's top surface provides no such covering structure, as the top surface is largely non-existent. It is predominated by open passages 82 providing access to each leg 14. These passages far and away trump any alleged covering structure provided by the top surface. Nor it is obvious to remove the passages because their presence permits introduction of the tool 84, and the tool is necessary to provide pressing force to each leg 14 in order to drive the wires into their IDC type clips. So any suggestion of a cap is counterintuitive because a cap would

obstruct the path of the tool. It is therefore further believed that Sowinski '805 fails to teach or suggest the claimed two part housing including a cap and a base.

As to claims 5 and 13, Sowinski '805 does not disclose a blade-type terminal. Sowinski's disclosure does not set forth how the wire attachment 18 of the terminal 10 is connected to an electrical lead. Certainly, Sowinski fails to explain how the shape of the wire attachment 18 interacts with an electrical lead (col. 2, lines 35-38). The most that Sowinski can be said to teach is shown by Fig. 1 which, if anything, suggests that a wire must be inserted between the planar and angled surfaces comprising the wire attachment 18. Clearly this is different from the claimed blade-type terminal which is shown in Figs. 1-3 and 5-6.

It is submitted that the above amendments place claims 1-16 in condition for allowance. Accordingly, the application is resubmitted for reconsideration. A favorable action is respectfully requested.

Respectfully submitted,



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Attorney Docket: IDEAL 413
June 30, 2003